

Serial No. 10,674,854

Docket No. 97781-00002

Remarks

Claims 1-9 are pending in this application. Claims 7 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mattson, U.S. Patent No. 3,468,041. Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mattson in view of Miller, U.S. Patent No. 5,438,770. In view of the amendments to the claims and the following Remarks, applicants respectfully traverse the rejections of the claims and request reconsideration.

Claims 1, 3 and 7 have been amended to recite that the present invention is used on self-propelled snow blowers having an engine operably connected to two drive wheels to propel the snow blower. No new matter is added.

As set forth in the specification, the present invention is directed to glide wheels to support the auger housing of a self-propelled or power driven snow blower and to provide for clearance between the scraper blade and the surface to be cleared of snow. As discussed in the specification, prior art self-propelled snow blowers used skid shoes on the bottom of the auger housing. Skid shoes experience wear in use and must be replaced when the skid surface is worn away. In addition, irregularities in the surface being cleared can cause movement of the snow blower to be abruptly halted.

The glide wheels of the present invention overcome these and other deficiencies of skid shoes used on the auger of self-propelled snow blowers. Glide wheels have reduced friction with the ground, improving movement of the snow blower. Glide wheels require less frequent replacement than skid shoes. In addition, the height difference between the scraper blade and the bottom of the wheel remains constant, preventing the scraper blade from digging into the surface to be cleaned. Glide wheels

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have the further advantage that they roll over obstacles that skid shoes would collide with or dig into.

As recited in the claims as amended, the self-propelled snow blower of the present invention includes an engine operably connected to two drive wheels which propel the snow blower. A front-mounted auger has a first sidewall, a second sidewall and a scraper blade. As recited in claims 1 and 2 as amended, first and second glide wheels are affixed to the first and second sidewalls of the auger housing to support the auger housing. As recited in claims 3 through 6 as amended, glide wheel assemblies may be affixed to the first and second sidewalls to provide support to the auger housing. Claims 7 through 9 as amended recite means for translating the mechanical support from the glide wheel to the auger housing of a self-propelled snow blower, and means for fixedly adjusting the position of the axle axis relative to the auger housing.

35 U.S.C. §102(b)

Claims 7 and 8 stand rejected under 35 U.S.C. §102(b) based upon Mattson.

Mattson describes a snow thrower in which the impeller is driven by a concentrically disposed electric motor contained in a sealed housing which extends into the side of an impeller housing. Col. 3, lines 48-65. Mattson is directed to the problem of cooling the electric motor on the snow thrower. Col. 1, line 64 to Col. 2, line 8. The snow thrower in Mattson cools the electric motor utilizing the snow picked up by the impeller. Col. 2, lines 1-29. The electric motor in the snow thrower in Mattson is connected directly to the impeller through the side of the auger housing to which the motor is attached. The electric motor is not used to drive wheels or propel the snow thrower. Rather, the snow thrower described in Mattson is propelled by being physically pushed by the user.

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Wheels are provided on the impeller housing to allow the user to physically push the snow thrower of Mattson.

In addition, the wheels on the auger of the snow thrower described in Mattson do not set the clearance between the surface to be cleaned and of snow and the scraper blade. As described in Mattson at Col. 6, lines 45-58, the height of the scraper blade is determined by the rearwardly extending skid 32a on the handle 32 together with the wheel, as the handle is used to pivot the auger about the axis of the wheels, and thereby adjust the height.

To anticipate a claim under 35 U.S.C. § 102(b), a single prior art reference must disclose every limitation recited in the claims. MPEP § 2131. Claims 7 and 8 as amended recite that the snow blower of the present invention comprises an engine operably connected to two drive wheels which propel the snow blower. Mattson does not describe a self-propelled snow blower having an engine operably connected to drive wheels as recited in claims 7 and 8 as amended. Accordingly, claims 7 and 8 as amended overcome the rejection under 35 U.S.C. § 102(b) based on Mattson.

35 U.S.C. §103(a)

Claims 1-9 stand rejected under 35 U.S.C. §103(a) based on Mattson in view of Miller. As discussed above, Mattson is directed to a snow thrower having an electric motor within a sealed casing concentrically disposed to an impeller within the impeller housing. The sealed casing is in heat transfer relation with the snow in the housing. "The sealed casing is centrally located with respect to the axis of the impeller so that belt or chain drives are not required and the motor and a speed reducer are completely sealed within the casing for protection against moisture." Col. 3, lines 52-64. According to Mattson, by locating the electric motor concentrically disposed with the impeller, the

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snow thrower of Mattson has improved balance, and the electric motor is cooled by contact of snow with the motor casing. Col. 1, lines 13-28.

Miller describes a self-propelled snow blower having an engine on a frame above a drive track or drive wheels which are powered by the engine, with an auger housing attached to the front of the snow blower. The auger housing has skid shoes on the side wall, which is typical in self-propelled snow blowers of the type described in Miller and the prior art. As noted in Miller, a self-propelled snow blower "can weigh as much as several hundred pounds". Col. 1, lines 49-51. The problem addressed by Miller is the difficulty in steering the self-propelled snow blower due to the weight. To address this problem, Miller describes a pivot wheel located near the drive track or drive wheel which can be lowered by the operator to improve the ability of the snow blower to turn.

In the Office Action at pages 2-5, the Examiner states that it would be obvious to one of ordinary skill in the art to modify the snow blower in Mattson to include drive wheels on the snow blower, as described by Miller, to arrive at a snow blower of the type recited in the claims. At pages 5-6 of the Office Action, the Examiner states that "the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 U.S.P.Q. 871 (CCPA 1981)." As set forth below, the teachings of the references cited by the Examiner do not teach or suggest the combination recited in the claims as amended. In addition, the combination proposed by the Examiner would necessarily change the principle of operation of the primary reference, Mattson. The MPEP specifically states that the

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principle of In re Keller does not apply where the proposed combination would change the principle of operation of the primary reference. MPEP §2145.

One skilled in the art would not be motivated to combine Mattson and Miller in the manner suggested by the Examiner. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention obvious in light of the teachings of the references." Ex parte Clapp, 227 U.S.P.Q. 972, 973 (Bd. of Pat. App. & Inter. 1985). Mattson is directed to the problem of cooling the sealed electric motor on a snow thrower, while Miller is directed to the problem of steering the driver tracks on a snow blower. There is no teaching or suggestion in either Mattson or Miller to combine the references to arrive at the combination recited in the claims. Accordingly, it is the duty of the Examiner to explain why the combination of the teachings is proper. MPEP §2142. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

The Examiner suggests that one skilled in the art would be motivated to modify the electric motor driven snow blower of Mattson by adding drive wheels to reduce user fatigue and improve safety. This is not supported by any evidence, and is contrary to the teachings of the references cited. Miller states that a disadvantage of the self propelled snow blower is that it is very heavy and difficult to steer. One skilled in the art would not be motivated to try to reduce fatigue of users by modifying the light weight pushable snow blower of Mattson by combining it in any manner with the heavy snow blower of Miller to reduce fatigue as suggested by the Examiner. Accordingly, the Examiner has

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not identified any teaching, suggestion or motivation to combine the references in the manner suggested, either in the references themselves or based on the knowledge of those skilled in the art. Thus, the Examiner's rejection does not meet the basic requirements of a prime facie case of obviousness as set forth in MPEP §2143.

The Examiner, citing In re Keller, states that it is not necessary that the features of a secondary reference be physically incorporated in the primary reference. However, the combination suggested by the Examiner would change the principle of operation of the primary reference, Mattson, and therefore the principle cited by the Examiner does not apply in this case. Mattson describes a snow thrower having an electric motor contained in a sealed casing and mounted concentrically on the impeller within the auger housing to drive the impeller within the housing. There is no way that the sealed electric motor of Mattson could be operably connected to drive wheels to drive the snow thrower.

Although not suggested by the Examiner, the use of belts or chain drives connected to drive wheels would necessarily change the principle of operation of the snow thrower of Mattson, as Mattson states that an advantage of the device is that it does not include either belts or chain drives. Col. 3, lines 61-64. There is no way to modify Mattson to include drive wheels without changing the principle of operation of the snow thrower, and the Examiner has not suggested any such modification. Because a combination cannot change the principle of operation of the primary reference, see MPEP § 2143.01, the Examiner's rejection under 35 U.S.C. § 103(a) should be withdrawn.

In this instance, it is only the applicant's application which suggests the desirability of attaching glide wheels to the housing of a self-propelled snow blower. It appears that the Examiner has engaged in impermissible hindsight, using the applicant's disclosure as a road map to select features from references to arrive at the claimed

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invention. For at least the foregoing reasons, the Examiner's rejection is improper, and applicant respectfully requests that the rejections of claims 1-9 under 35 U.S.C. §103(a) be withdrawn.

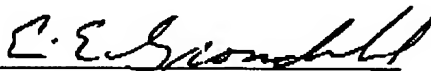
In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes after considering these remarks, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

Because the reasons above are sufficient to traverse the rejection, Applicants have not explored, nor do they now present, other possible reasons for traversing such rejections. Nonetheless, Applicants expressly reserve the right to do so, if appropriate, in response to any future Office Action.

A Request for Continued Examination and a Petition for a Two-Month Extension of Time and the associated fees have been submitted herewith. If any additional fee is required or otherwise necessary to cover any deficiency in fees previously paid, authorization is hereby given to charge our Deposit Account No. 50-3569.

Respectfully submitted,

Date: October 5, 2005



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